



ELSEVIER

Animal Feed Science and Technology 49 (1994) 338–340

ANIMAL FEED  
SCIENCE AND  
TECHNOLOGY

## Contents of *Animal Feed Science and Technology*, Volume 49

VOL. 49 NOS. 1–2

SEPTEMBER 1994

Effects of supplemental microbial phytase on availability of phosphorus contained in maize, wheat and triticale to pigs M. Düngelhoef, M. Rodehutsord, H. Spiekers and E. Pfeffer (Bonn, Germany).....	1
Effect of treating or supplementing maize stover with urea on its utilization as feed for sheep and cattle B. Manyuchi, S. Mikayiri and T. Smith (Marondera, Zimbabwe).....	11
Use of electrophoresis to quantify ruminal degradability of protein from concentrate feeds M.A. Messman and W.P. Weiss (Wooster, OH, USA) .....	25
The effect of level of allowance on the intake and digestibility of finger millet ( <i>Eleusine coracana</i> ) straw in crossbred heifers A. Subba Rao, U.H. Prabhu, S.R. Sampath (Bangalore, India) and J.B. Schiere (Wageningen, Netherlands) .....	37
Comparison of the slaughter method and simple T-piece cannulation of the terminal ileum for determining ileal amino acid digestibility in meat and bone meal for the growing pig A. Donkoh, P.J. Moughan and W.C. Smith (Palmerston North, New Zealand) .....	43
The laboratory rat as a model animal for determining ileal amino acid digestibility in meat and bone meal for the growing pig A. Donkoh, P.J. Moughan and W.C. Smith (Palmerston North, New Zealand) .....	57
True ileal digestibility of amino acids in meat and bone meal for the growing pig—application of a routine rat digestibility assay A. Donkoh, P.J. Moughan and W.C. Smith (Palmerston North, New Zealand) .....	73
Nutritional value of seaweed ( <i>Ulva rigida</i> ) for poultry M.R. Ventura, J.I.R. Castañon (Las Palmas de Gran Canaria, Spain) and J.M. McNab (Roslin, UK) .....	87
Apparent absorption of Ca, P and Zn, and true absorption of <sup>65</sup> Zn in rats fed diets containing lupin ( <i>Lupinus angustifolius</i> ) seed meal or its fractions L.A. Rubio, G. Grant, H. Rahman, P. Dewey and A. Pusztai (Aberdeen, UK) .....	93
Urea vs. urea and escape protein for finishing calves and yearlings M.H. Sindt (Scottsbluff, NE, USA), R.A. Stock and T.J. Klopfenstein (Lincoln, NE, USA) .....	103
Biological and chemical assessment of feed proteins before and after rumen exposure P. Susmel (Udine, Italy), M. Antongiovanni (Firenze, Italy), B. Stefanon, C.R. Mills (Udine, Italy), V.A. Hindle and A.M. van Vurren (Lelystad, Netherlands) .....	119
Assessment of phenolics-related antinutritive effects in Mediterranean browse: a comparison between the use of the in vitro gas production technique with or without insoluble polyvinylpyrrolidone or nylon bag	

K. Khazaal (Aberdeen, UK), J. Boza (Granada, Spain) and E.R. Ørskov (Aberdeen, UK) .....	133
Influence of peptides, amino acids and urea on microbial activity in the rumen of sheep receiving grass hay and on the growth of rumen bacteria in vitro	
R. Cruz Soto, S.A. Muhammed, C.J. Newbold, C.S. Stewart and R.J. Wallace (Aberdeen, UK) .....	151

#### Short communication

The growth of pigs from 6 to 10 kg when fed fish silages that were preserved either by formic acid or by fermentation	
S.P. Rose, D.M. Anderson and M.B. White (Truro, N.S., Canada) .....	163

### VOL. 49 NOS. 3-4

OCTOBER 1994

The post-ruminal digestion of dry matter, nitrogen and amino acids in wheat-based distillers' dried grains and canola meal	
R.J. Boila and J.R. Ingalls (Winnipeg, Man., Canada) .....	173
Effect of linseed oil supplementation on feed degradation and microbial synthesis in the rumen of ciliate-free and refaunated sheep	
L. Broudiscou (Ceyrat, France), S. Pochet (Poligny, France) and C. Poncet (Ceyrat, France) .....	189
Effect of a yeast culture ( <i>Saccharomyces cerevisiae</i> ) on neutral detergent fiber digestion in steers fed oat straw based diets	
F. Plata P., G.D. Mendoza M., J.R. Bárcena-Gama and S. González M. (México, México) ..	203
Influence of diet and yeast supplement on in vitro ruminal characteristics	
I. Zelenák, D. Jalč, V. Kmet' and P. Siroka (Košice, Slovak Republic) .....	211
The influence of urea supplementation or treatment of rice straw and fish meal supplementation on rumen environment and activity in sheep	
D.M. Mgheni, A.E. Kimambo (Morogoro, Tanzania), F. Sundstøl (Ås, Norway) and J. Madsen (Frederiksberg, Denmark) .....	223
Effect of enzyme supplementation of wheat and triticale based diets for broilers	
M.P. Flores, J.I.R. Castañon (Las Palmas de Gran Canaria, Spain) and J.M. McNab (Roslin, UK) .....	237
The effect of alkali treatment of cereal straws on digestibility and methane production by sheep	
A.R. Moss, D.I. Givens (Stratford on Avon, UK) and P.C. Garnsworthy (Loughborough, UK) .....	245
The nutritive value and chemical composition of energy-rich by-products for ruminants	
E.R. Deaville, A.R. Moss and D.I. Givens (Stratford on Avon, UK) .....	261
The effect of starch supplementation of straw on microbial protein supply in sheep	
M.J. Gomes, F.D.D. Hovell, X.B. Chen, E.M. Nengomasha and D. Fikremariam (Aberdeen, UK) .....	277
Replacing maize grain with triticale grain in lactation diets for dairy cattle and fattening diets for steers	
W.A. Smith, G.S. du Plessis and A. Griessel (Stellenbosch, South Africa) .....	287
Effect of heat or formaldehyde treatment and differences in basal diet on the rumen degradability of protein in soyabean meal and in rapeseed meals of different glucosinolate content	
A.M.H. Subuh, T.G. Rowan and T.L.J. Lawrence (Neston, UK) .....	297
The effect of silo type and dry matter content on the maize silage fermentation process and ensiling loss	

G. Xiccato, M. Cinetto, A. Carazzolo (Padova, Italy) and M.E. Cossu (Buenos Aires, Argentina) .....	311
Alteration of absorption of <i>D</i> -xylose by parasitism and feeding of grain legumes to sheep F. Woldetsadick, R.M. Dixon, H.P. Yuen and J.H.G. Holmes (Parkville, Vic., Australia).....	325
<b>Author Index</b> .....	335
<b>Announcement from the Publisher</b> .....	341

